

tacula in all my specimens have never exceeded the length of the body, are usually seven or eight in number, and taper to the point insensibly. Every part of the body is generative of young, which may frequently be seen hanging from the parent at the same time in different stages of their growth. Baker's figure represents this variety very well.

The second is a larger animal and comparatively rare, less sensible to external impressions, and of a more gracile form. Its colour is a dilute olive-green with paler tentacula, which are considerably longer than the body, and hang like silken threads in the water, waving to and fro without assuming that regular circular disposition which they commonly do in the *H. viridis*. I have not observed more than one young at a time, pullulating from near the middle of the body, and after this has attained a certain growth, the polype has the appearance of being dichotomously divided.

Dr Fleming's *Hydra vulgaris*, Brit. Anim. 553, embraces this and the preceding, as well as the following species, which are considered the mere variations of one protean original ;—

“ Facies non omnibus una,
Nec diversa tamen : ”—

but the conviction of their permanent distinctness has been forced upon me by a long continuous observation of individuals in a state of confinement. Had, however, personal observation been wanting, the same conclusion would have been willingly adopted on the paramount authorities of Trembley and Baker, who had very carefully studied these creatures ; and Pallas speaks very decidedly to the same purport. “ Species Hydræ a Linnæo* pro varietatibus habitas, a Ræselio primum bene determinatas adoptavi, cum de trium priorum constantia, propria me experientia certissimum reddiderit.”—*Elench.* 29.

3. *H. FUSCA*, brown or griseous ; inferior half of the body suddenly attenuated ; tentacula several times longer than the body.

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Polypes à long bras, *Tremb.* Mem. pl. 1. fig. 3, 4, 6 ; pl. 2. fig. 1, 3, 4 ; pl. 3, fig. 11 ; pl. 5, fig. 1-4 ; pl. 6, fig. 3-7, 9, 10 ; pl. 8. fig. 8, 11 ; pl. 9. copied in *Adams*, *Micros.* 399, pl. 21, fig. 7, 8 ; pl. 23, A. B ; pl. 24, A. B. fig. omnes. *Cuv.* Reg. Anim. iii. 295.—Long armed fresh-water Polype, *Ellis*, *Corall.* xvi. pl. 28. fig. C. (the tentacula shortened for the conveniency of introducing them within the size of the plate.)—Second sort of Polype, *Baker*, *Polyp.* 18. c. fig.—*Hydra oligactis*, *Pall.* *Elench.* 29.—*H. fusca*, *Lin.* *Syst.* 1320. *Ellis* and *Soland.* *Zooph.* 9. *Berk.*

* In the 10th edit. of *Syst. Nat.* p. 816, under the name of *Hydra Polypus*.